	Туре	L #	Hits	Search Text	DBs	Time Stamp	Comment s
	BRS	L1	17770	pll	USPA T	2004/03/1 5 14:38	
2	BRS	L2	11682	frequency near5 compara\$5	USPA T		
3	BRS	L3		phase near4 compara\$5	USPA T	.,	
4	BRS	L4	3624	2 near5 3	USPA T		
 5	BRS	L5	i	1 and 4	USPA T		
6	BRS	L6	21732 1	gain	USPA T	2004/03/1 5 14:28	
7	BRS	L7		6 and 5	USPA T	1	
8	BRS	L8	1734	clv	USPA T		
9	BRS	L9	36	7 and 8	USPA T	.	
10	BRS	L10	28154	pll	US-P GPUB; EPO; JPO; DERW ENT; IBM_ TDB	2004/03/1 5 14:38	
11	BRS	L11	10982	frequency near5 compara\$5	US-P GPUB; EPO; JPO; DERW ENT; IBM_ TDB	2004/03/1 5 14:39	·
12	BRS	L12	20466	phase near5 compara\$5	US-P GPUB; EPO; JPO; DERW ENT; IBM_ TDB	2004/03/1 5 14:39	

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13	BRS	L13	3868	11 near5 12	I I I	US-P GPUB; EPO; JPO; DERW ENT; IBM_ IDB	2004/03/1 5 14:39	·
14	BRS	L14	1531	10 and 13	C ; E ; E ; I	JS-P GPUB ; EPØ; JPÖ; DERW ENT; IBM_ CDB	2004/03/1 5 14:39	
15	BRS	L15	16114 7	gain	G ; E J D E I	PO:	2004/03/1 5 14:39	,
16	BRS	L16		14 and 15	G; E J D	S-P PUB PO; PO; ERW NT; BM_ DB	2004/03/1 5 14:39	
17	BRS	L17	1434	clv	G; ; Ei Di Ei	PO;	2004/03/1 5 14:39	

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18	BRS	L18	6	16 and 17	US-P GPUB; FPO; JPO; DERW ENT; IBM_ TDB	2004/03/1 5 14:39	

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TITLE:

(19) United States

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(43) Pub. Date: May 16, 2002

CLOCK EXTRACTING DEVICE OF DISC REPRODUCING APPARATUS

(76) Inventors: Massayoshi Nakamura, Hiraketa-shi (IP); Emi Kitano, Shiki-gun (IP)

Correspondence Address: WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021 (US)

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ABSTRACT

A clock extracting device of a disc reproducing apparatus, comprising: an information read-out member for reading

information signals from a disklike information recording medium; a voltage control oscillator; a phase comparator for comparing a phase of the information signals read by the information read-out member and a phase of an output of the voltage control oscillator, a frequency comparator for comparing a frequency of the information signals read by the information read-out member and a frequency of the output of the voltage control oscillator; a speed sensor for detecting the frequency of the output of the voltage control oscillator at a reference clock so as to output a speed signal; a gain command unit for designating a loop gain of a clock extracting circuit in accordance with the speed signal outputted from the speed sensor; a charge pump which discharges or draws electric current in accordance with outputs of the phase comparator and the frequency comparator and changes over an output current value in accordance with a gain command of the gain command unit; and a series circuit of a resistor and a capacitor, whose one end is connected to an output of the charge pump and the other end of which is grounded or is connected to a reference voltage; wherein an output voltage between the opposite ends of the series circuit acts as a control voltage for the voltage control oscillator and the gain command unit issues the gain command such that the loop gain of the clock extracting circuit secures a desired operating point in accordance with a read rate of the infor-

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Summary of [0005] Ito FIG. 11 conventiona signals fet one input frequency of comparator only applie inputted to voltage cor phase compa

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